

REMARKS/ARGUMENTS

Claims 29-60 are pending. Claims 29 is amended. Claims 58-60 are newly added. Claims 1-28 were canceled previously. Claims 46-55 are withdrawn. Support for the amendment to Claim 29 can be found in Fig. 2, for example. Support for newly added Claim 58 can be found in original (now-canceled) Claim 1, for example. Support for newly added Claims 59 and 60 can be found in Claims 48 and 49, for example. No new matter is added.

In the outstanding Office Action, Claim 57 was rejected under 35 U.S.C. § 112, second paragraph, as indefinite. Claims 29-32, 36, 38, and 42 were rejected under 35 U.S.C. § 102(b) as anticipated by Nedelec et al. (U.S. Patent No. 4,292,065, herein "Nedelec"). Claim 56 was rejected under 35 U.S.C. § 102(b) as anticipated by Nedelec or as obvious over Nedelec. Claims 33-35, 37, 39, and 44 were rejected under 35 U.S.C. § 103(a) as obvious over Nedelec. Claim 40 was rejected under 35 U.S.C. § 103(a) as obvious over Nedelec in view of Gulotta (U.S. Patent No. 3,409,422). Claims 41 and 43 were rejected under 35 U.S.C. § 103(a) as obvious over Nedelec in view of Johnson (U.S. Patent No. 4,139,359, herein "Johnson '359"). Claim 45 was rejected under 35 U.S.C. § 103(a) as obvious over Nedelec in view of Johnson (U.S. Patent No. 4,123,246, herein "Johnson '246").

Regarding the rejection of Claim 57 as indefinite, that rejection is respectfully traversed by the present response.

Regarding Claim 57, the outstanding Office Action states:

Claim 57 is unclear and ambiguous. It is unclear how the hardened glass sheet is overturned when released from a last roller/backing roller pair.¹

The outstanding Office Action further states:

¹ Outstanding Office Action, page 2.

Applicant argues on page 12 that NEDELEC fails to teach the limitations of claim 57, however, the language of instant claim 57 is vague and unclear, which lends itself to a 112 2nd paragraph rejection. It is unclear to one of ordinary skill in the art how the hardened glass sheet is suddenly overturned when released from a last roller/backing roller pair.²

Accordingly, the outstanding Office Action asserts that it is unclear **how** the glass sheet is overturned from method Claim 57.

Applicants respectfully submit that there is no requirement, either statutory or in case law, for method Claim 57 to specify how the glass sheet is overturned as asserted in the outstanding Office Action. Rather, for a claim to satisfy the requirements of 35 U.S.C. § 112, second paragraph, the claim must particularly point out and distinctly claim the subject matter which the applicant regards as the invention. In the present case, dependent method Claim 57 depends from dependent method Claim 33 which recites "wherein each hardened glass sheet is overturned on release from the last roller/backing roller pair associated with the shaping bed, the glass sheets thus overturned being received by a conveyor belt" Method Claim 57 further recites in part, "wherein each hardened glass sheet is overturned, relative to a position occupied by the hardened glass sheet as it contacts a last of the backing rollers, upon release from the last roller/backing roller pair associated with the shaping bed." Applicants respectfully submit that the features of method Claim 57 particularly point out that the glass sheet is overturned, and that this overturning is **relative to a position occupied by the glass sheet as it contacts a last of the backing rollers**. In other words, Claim 57 further defines the process recited in Claim 33 by specifying the particular orientation of the glass sheet. Thus, Claim 57 particularly points out and distinctly claims the subject matter of the invention recited, and if the rejection of Claim 57 as indefinite is maintained in the next official communication from the U.S. Patent and Trademark Office, Applicants respectfully

² Outstanding Office Action, page 9.

request that the Examiner cite authority, either statutory or in case law, for the requirement that a claim such as dependent Claim 57 must further recite how the recited action is performed. In this regard, the fact that a claim term is broad does not make the term indefinite. MPEP § 2173.04 states:

Breadth of a claim is not to be equated with indefiniteness. *In re Miller*, 441 F.2d 689, 169 USPQ 597 (CCPA 1971). If the scope of the subject matter embraced by the claims is clear, and if applicants have not otherwise indicated that they intend the invention to be of a scope different from that defined in the claims, then the claims comply with 35 U.S.C. 112, second paragraph.³

Accordingly, the mere fact that the features of method Claim 57 may be broadly recited does not make the features of Claim 57 unclear or indefinite.

Regarding the rejection of Claims 29-32, 36, 38, and 42 under 35 U.S.C. § 102(b) as anticipated by Nedelec, that rejection is respectfully traversed by the present response.

Amended independent Claim 29 recites, in part:

wherein the shaping bed has a profile extending in a circular arc of more than 90°, a plurality of blow-boxes are disposed along at least a portion of the circular arc, and the portion extends over more than 90° of the circular arc,

and wherein, upon leaving the shaping bed, the hardened glass sheets are moved in a direction opposite that in which they were fed into the bed.

Accordingly, the method bends the glass sheets over a bed according to a radius of curvature of the bed. The glass sheets progressively assume their shape upon entering the shaping bed over a first shaping zone, and the glass sheets are hardened by tempering or cooling in a second zone. The shaping bed has a profile extending a circular arc of more than 90°. **A portion of the arc includes a plurality of blow-boxes disposed along it. This portion extends across an arc greater than 90°.**

³ Manual of Patent Examining Procedure, 8th ed., Revision 6, August 2007.

In contrast, Nedelec describes, in col. 7, lines 21-27, leaf springs that could be extended to form a complete half-circle. The outstanding Office Action cites this section as evidence that Nedelec discloses a shaping bed that comprises a full half-circle.⁴ Applicants note that, as discussed in the previous response, the leaf springs are not a shaping bed as recited in independent Claim 29. Rather, the extension described in Nedelec occurs after the shaping bed ends, and this system is merely an alternative for removing the glass sheets at the **discharge** of the tempering section (see col. 7, lines 9-11). However, in order to advance prosecution, Claim 29 is amended to clarify the structure of the shaping bed and now recites that the shaping bed includes a plurality of blow-boxes disposed along at least a portion of the circular arc, and the portion extends over more than 90° of the circular arc. Applicants respectfully submit that, assuming *arguendo*, the leaf springs of Nedelec were extended to form a complete half-circle as asserted in the outstanding Office Action, the leaf springs would not include blow-boxes disposed over a portion of an arc greater than 90° of the arc. Nor would the remainder of the device described in Nedelec include such a portion with blow-boxes. Accordingly, amended independent Claim 29 patentably distinguishes over Nedelec for at least the reasons discussed above.

As further discussed in the previous response, none of the remaining references describes a shaping bed of with an arc of more than 90°. For example, Gulotta describes a generally linear or gently curved path for its sheets, not a shaping bed with an arc of more than 90°. Johnson '359 also describes a generally linearly shaped shaping bed and does not suggest a shaping bed with an arc of more than 90°. Johnson '246 suffers from the same deficiencies as Johnson '359 does. Accordingly, Applicants respectfully submit that no reasonable combination of Nedelec, Gulotta, Johnson '359, and Johnson '246 would include

⁴ Outstanding Office Action, pages 2-3.

all the features recited in amended independent Claim 29 or any of the claims depending therefrom.

Applicants wish to make the following additional remarks regarding dependent Claim 34 which recites:

The method as claimed in claim 33, wherein a hardened glass sheet is overturned by causing it, on its release, to be projected under the effect of its speed so that it strikes, by way of its front lower end edge, against an upper part of an idle roller whose axis is parallel to that of the advancing elements of the shaping bed, the hardened glass sheet then tilting about a line of contact with the idle roller under the effect of its weight to drop onto the conveyor belt in the overturned state.

Accordingly, upon its release, the hardened glass sheet is overturned. **The overturning is caused by projecting the glass sheet so that it strikes, by way of its front lower edge, against an upper part of an idle roller whose axis is parallel to the advancing elements of the shaping bed.** The hardened glass sheet is then **tilted** about a line of contact with the idle roller. This tilting occurs under the effect of the weight of the glass sheet. The glass sheet drops onto the conveyor belt in an overturned state.

Regarding dependent Claim 34, the outstanding Office Action states:

It would have been obvious that if the glass travels along a semi-circle shaping bed that the glass sheets would end up on its reverse side at the end of the shaping as in instant claims 34 and 35.⁵

Additionally, on page 8, the outstanding Office Action further addresses Claim 34 stating:

Applicant argues on page 12 that NEDELEC does not teach overturning the glass sheet. However, it would have been obvious to one of ordinary skill in the art that the glass would have been overturned if traveling in a semi-circle. The examiner has drawn the following figure to illustrate how one

⁵ Outstanding Office Action, page 5.

of ordinary skill in the art would have known that the glass was overturned.⁶

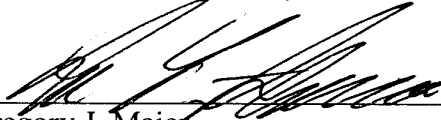
The above-noted statements in the outstanding Office Action are the only statements directly addressing Claim 34. Thus, the outstanding Office Action has addressed a few words recited in Claim 34 in isolation without addressing all of the features recited in Claim 34. For example, the outstanding Office Action has not addressed that the glass sheet is overturned **upon its release**. The glass sheet is projected under the effect of its speed to **strike, via its front lower edge, against an upper part of an idle roller**. The outstanding Office Action has not addressed that the glass sheet is **tilted about a line of contact with the idle roller**. The outstanding Office Action has not addressed the feature that the idle roller has an axis of rotation parallel to the advancing elements of the shaping bed. The outstanding Office Action has not addressed the feature that the glass sheet drops onto a conveyor in an overturned state. Applicants respectfully submit that none of the cited references discloses the above-noted features, and Applicants respectfully request that the rejection of Claim 34 be withdrawn.

⁶ Outstanding Office Action, page 8, response to arguments.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Gregory J. Maier
Attorney of Record
Registration No. 25,599

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/07)

Lee L. Stepina
Registration No. 56,837